

1           1.     A method for identifying objects referenced in a stream of text, the method  
2 comprising:

3                     receiving an incoming stream of text comprised of words;  
4                     consulting a semantic network to automatically identify one or more  
5 word patterns in the incoming stream of text with a single examination of  
6 each word; and  
7                     referencing a known object identified by a word pattern of the  
8 semantic network.

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10           2.     The method of claim 1, further comprising loading the semantic network  
11 substantially entirely into RAM memory of a processor and wherein the step of consulting  
12 the semantic network is conducted by consulting the semantic network within the RAM  
13 memory.

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15           3.     The method of claim 1, further comprising dividing the stream of text into a  
16 plurality of threads and conducting the step of consulting a semantic network concurrently  
17 for words in each of the plurality of threads and further comprising examining groups of  
18 words spread over adjacent threads at the boundaries of the threads for word patterns.

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20           4.     The method of claim 1, wherein consulting a semantic network further  
21 comprises consulting a semantic network of recognized words and patterns of words in a  
22 hierarchical order moving from identified nodes to related nodes linked with the identified  
23 nodes.

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25           5.     The method of claim 1, wherein consulting a semantic network further  
26 comprises examining words in the stream of text in a sequential order as the words are

1 received and formatting the stream of text to represent identified objects without persistently  
2 storing the stream of text.

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4 6. The method of claim 1, further comprising tokenizing the stream of text into  
5 individual words, and wherein the step of consulting a semantic network further comprises  
6 analyzing each word in order of occurrence in the stream of text by comparing the individual  
7 words to identified words in the semantic network.

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9 7. The method of claim 6, wherein the step of consulting a semantic network  
10 further comprises finding a match between an individual word in the stream of text and an  
11 identified word in the semantic network and comparing the individual word and an adjacent  
12 word of the stream of text to a word pattern in the semantic network.

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14 8. The method of claim 6, wherein the step of consulting a semantic network  
15 further comprises continually adding words of the stream of text to recognized word patterns  
16 and comparing the result to other word patterns in the semantic network until no more word  
17 patterns containing the individual word are located.

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19 9. The method of claim 1, further comprising presenting the identified known  
20 objects to a user.

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22 10. The method of claim 9, wherein presenting the identified known objects to  
23 a user further comprises providing links between identified word patterns in the stream of  
24 text and objects in a knowledge base to which the word patterns identify.

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26 11. The method of claim 10, wherein providing links between identified word

1 patterns in the stream of text and objects in a knowledge base comprises displaying the word  
2 patterns corresponding to an object as a URL, the URL leading to information related to the  
3 object.

4  
5 12. A method for identifying objects referenced in a stream of text, the method  
6 comprising:

7 loading a semantic network substantially entirely into RAM memory  
8 of a processor, the semantic network comprised of recognized words and  
9 patterns of words in a hierarchical order;

10 receiving an incoming stream of text comprised of words;

11 tokenizing the stream of text into individual words;

12 examining the individual words in the stream of text in a sequential  
13 order as the words are received by consulting the semantic network within  
14 the RAM memory to automatically identify one or more word patterns in the  
15 incoming stream of text with a single examination of each individual word  
16 in the order that the individual words are received examining the individual  
17 words comprising:

18 finding a match between an individual word in the stream of  
19 text and an identified word in the semantic network and comparing  
20 the individual word and an adjacent word of the stream of text to a  
21 word pattern in the semantic network, and

22 continually adding words of the stream of text to recognized word  
23 patterns and comparing the result to other word patterns in the  
24 semantic network until no more word patterns containing the  
25 individual word are located;

referencing a known object identified by a word pattern of the semantic network; and

formatting the stream of text to represent identified objects without persistently storing the stream of text.

13. A system for identifying objects referenced in a stream of text, the system comprising:

an input pipeline configured to receive an incoming stream of text comprised of words;

a text analysis module configured to consult a semantic network to automatically identify one or more word patterns in the incoming stream of text with a single examination of each word; and

an object association module configured to reference a known object identified by a word pattern of the semantic network.

14. The system of claim 13, wherein the semantic network is configured to be loaded substantially entirely into RAM memory of a processor, and wherein the text analysis module is configured to consult the semantic network within the RAM memory.

15. The system of claim 13, wherein the input pipeline is further configured to divide the stream of text into a plurality of threads such that the semantic network may be consulted concurrently for words in each of the plurality of threads.

16. The system of claim 13, further comprising a word pattern comparison module configured to consult the semantic network in a hierarchical order moving from identified nodes to related nodes linked with the identified nodes.

1           17. The system of claim 13, wherein the text analysis module is further  
2 configured to examine words in the stream of text in a sequential order as the words are  
3 received and format the stream of text to represent identified objects without persistently  
4 storing the stream of text.

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6           18. The system of claim 13, wherein the text analysis module is further  
7 configured to break the stream of text into individual words, and to analyze each word in an  
8 order of occurrence of the word in the stream of text by comparing the individual words to  
9 identified words in the semantic network.

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11           19. The system of claim 18, wherein the text analysis module is configured to,  
12 upon finding a match between an individual word in the stream of text and an identified word  
13 in the semantic network, compare the individual word and an adjacent word of the stream  
14 of text to a word pattern in the semantic network.

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16           20. The system of claim 18, wherein the text analysis module is configured to  
17 continually add words of the stream of text to recognized word patterns and compare the  
18 result to other word patterns in the semantic network until no more word patterns are located.

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20           21. The system of claim 13, further comprising a compilation module configured  
21 to present the identified known objects to a user.

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23           22. The system of claim 21, wherein the compilation module is configured to  
24 present the identified known objects to a user by providing links between identified word  
25 patterns in the stream of text and objects in a knowledge base to which the word patterns  
26 identify.